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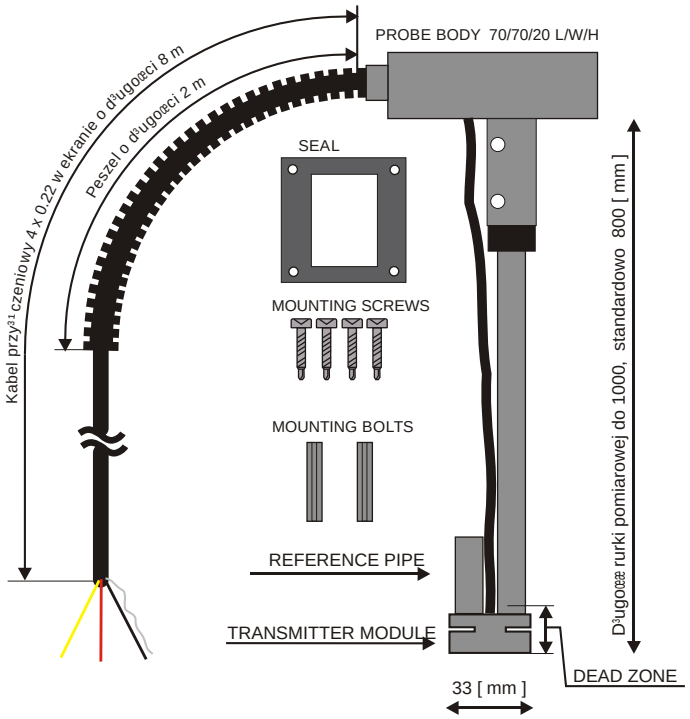
UMPP-2A Ultrasonic Fuel Measurement Meter analog probe



- high reliability
- high accuracy
- simple assembly
- measurement up to 1000 mm

DESTINY

The UMPP-2A ultrasonic probe is used to measure the fuel level in the tanks of diesel fuel-powered vehicles and machines. The probe is used in fuel consumption monitoring systems. It is a device that is easy to use and safe to use.

PRINCIPLE OF OPERATION and CONSTRUCTION

In measurements, the probe uses the properties of ultrasound. The transducer module shown in the figure emits an ultrasonic wave into the diesel fuel environment and then receives the echo signal. The level is determined by measuring the return time of the echo reflected from the fuel surface. The probe has a length standard - marked as a standard tube in the drawing - its presence allows the measurement result to be compensated for changes in: density, temperature and pressure. The possibility of constant calibration of the probe in the measured fuel means that the probe measurements are always stable and insensitive to changes in the type of fuel. In practice, this means accurate measurements of summer fuels, winter fuels and BIO fuels.

The construction of the probe ensures protection class IP68. The aluminum body - the electronics housing - is covered with a galvanic anti-corrosion coating. The plastic elements and cables used are made of oil-resistant materials. The connecting cable is protected by a two-meter length of conduit. The mechanical design of the transducer module ensures automatic cleaning of the probe from deposits. An additional protective element is the included filter mesh sleeve.

As standard, the probe is equipped with a measuring tube 800 mm long, probes can be ordered with a 1000 mm long tube.

The probe has a voltage output signal, the value of which is proportional to the measured liquid height in the tank. The analog probe software provides the ability to adjust the full 0_10V range for a probe with a shortened measuring tube. This feature of the probe allows full use of the recorder input, and thus greater accuracy of recorded measurements. Adjusting the full range to the tube length is possible after rescaling the probe output.

Technical data :

- supply voltage: 18 ... 30 V dc (nominal 24V dc)
- maximum current consumption from the power source: 20 mA
- output signal: voltage
- output signal standard: 0_10V
- liquid column measuring range: 33 to 1000 mm
- liquid column measurement accuracy: 1%
- dead zone*: max 33 mm
- probe weight: 0.65 kg (probe, accessories, cable)

The device has an E20 10R-04 4082 approval certificate

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